08-09-07 10/804836

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Docket No.: 10122/005003

(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Letters Patent of: Toshihiro Fukuda et al.

Patent No.: 7,219,761

Issued: May 22, 2007

For: MOTOR-OPERATED POWER STEERING

APPARATUS

REQUEST FOR CERTIFICATE OF CORRECTION PURSUANT TO 37 CFR 1.322

Attention: Certificate of Correction Branch

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Certificate

AUG 1 3 2007

of Correction

Dear Sir:

Upon reviewing the above-identified patent, Patentee noted a typographical error which should be corrected.

On the cover page:

On the cover page, section (30) Foreign Application Priority Data, line 3, "2000-272830" should be --2002-272830--.

The error was not in the application as filed by applicants; accordingly no fee is required.

Transmitted herewith is a proposed Certificate of Correction effecting such amendment. Also, enclosed is a copy of the cover page of the issued patent, a copy of the

AUG 13 2007

Patent No.: 7,219,761 Docket No.: 10122/005003

Updated Filing Receipt, and a copy of page 2 of the Declaration. Patentee respectfully solicits the granting of the requested Certificate of Correction.

Applicants believe no fee is due with this request. However, if a fee is due, please charge our Deposit Account No. 50-0591, under Order No. 10122/005003.

Dated: August 8, 2007

Respectfully submitted,

Jonathan P. Osha

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US007219761B2

(12) United States Patent

Fukuda et al.

(10) Patent No.:

US 7,219,761 B2

(45) Date of Patent:

*May 22, 2007

(54) MOTOR-OPERATED POWER STEERING APPARATUS

(75) Inventors: Toshihiro Fukuda, Maebashi (JP); Shuji Endo, Maebashi (JP); Hiroshi

Eda, Macbashi (JP); Osamu Tatewaki, Macbashi (JP); Kenichi Hayakawa, Macbashi (JP); Hirotaka Hatano, Atsugi (JP); Mineki Okamoto,

Kisarazu (JP)

(73) Assignee: NSK Ltd. (JP)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35

U.S.C. 154(b) by 6 days.

This patent is subject to a terminal dis-

claimer.

(21) Appl. No.: 10/804,836

(22) Filed: Mar. 19, 2004

(65) Prior Publication Data

US 2004/0245041 A1 Dec. 9, 2004

Related U.S. Application Data

(63) Continuation-in-part of application No. 10/088,790, filed as application No. PCT/JP01/06319 on Jul. 23, 2001, now Pat. No. 6,851,508.

(30) Foreign Application Priority Data

Jul. 21, 2000 Jul. 21, 2000 Sep. 19, 2002	(JP) (JP)	

(51) Int. Cl. **B62D** 5/04

(2006.01)

(52) U.S. Cl. 180/444; 180/443

(56) References Cited

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(Continued)

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DE

(Continued)

OTHER PUBLICATIONS

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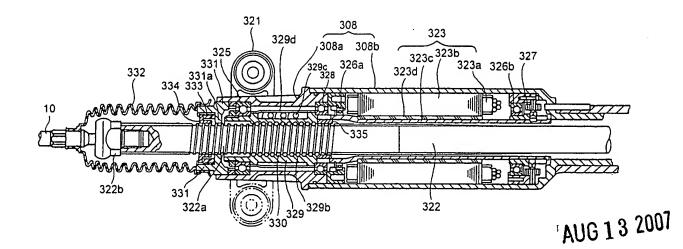
(Continued)

Primary Examiner—Tony Winner (74) Attorney, Agent, or Firm—Osha Liang LLP

(57) ABSTRACT

An electrically driven power steering apparatus is structured such that a large impact on a rack shaft occurs upon an impingement of a steering stopper, and, even when an axial force acting on a ball bearing of a presser member becomes zero, a rotation of the presser member is hindered by caulking c at a thin plate member. Therefore, the presser member does not slacken, and a predetermined axial force can be given again to the ball bearing when the impact dissipates. The thus structured power steering apparatus exhibiting, though the cost is low, an excellent shockproof characteristic and capable of preventing the bearing from coming off a ball screw nut, can be provided.

8 Claims, 14 Drawing Sheets



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APPL NO.

FILING OR 371 (c) DATE

ART UNIT

ATTY, DOCKET NO

DRAWINGS **TOT CLMS**

14

IND CLMS

10/804.836

03/19/2004

3611

10122/005003

8 2

CONFIRMATION NO. 7548

UPDATED FILING RECEIPT

OC000000013696811

Jonathan P. Osha OSHA & MAY L.L.P. **Suite 2800** 1221 McKinney St. Houston, TX 77010

Teauired No Docketin Date: Initials:

Date Mailed: 09/02/2004

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Filing Receipt Corrections, facsimile number 703-746-9195. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Toshihiro Fukuda, Maebashi-shi, JAPAN; Shuji Endo, Maebashi-shi, JAPAN; Hiroshi Eda. Maebashi-shi, JAPAN; Osamu Tatewaki, Maebashi-shi, JAPAN; Kenichi Hayakawa, Maebashi-shi, JAPAN, Hirotaka Hatano, Atsugi-shi, JAPAN; Mineki Okamoto, Kisarazu-shi, JAPAN;

Power of Attorney: The patent practitioners associated with Customer Number 22511.

Domestic Priority data as claimed by applicant

This application is a CIP of 10/088,790 08/12/2002 * which is a 371 of PCT/JP01/06319 07/23/2001 (*)Data provided by applicant is not consistent with PTO records.

Foreign Applications

JAPAN 2000-220404 07/21/2000 JAPAN 2000-220405 07/21/2000 JAPAN 2002-272830 09/19/2002 🗶

If Required, Foreign Filing License Granted: 06/02/2004

The number of your priority application, to be used for filing abroad under the Paris Convention is,

AUG 13 2007

US10/804,836

Projected Publication Date: 12/09/2004

Non-Publication Request: No

Early Publication Request: No

Title

Motor-operated power steering apparatus

Preliminary Class

180

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PTO/SB/106 (6-96)
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私は、米国法典第3.5 額1.19条(a)-(d)項又は3.65条(b)項に基き下記の、米国以外の国の少なくとも一世国を指定している特許協力条約3.65(a)項に基ずく国際出願、又は外国での特許出贈もしくは発明者証の出願についての外国優先権をここに主張するとともに、優先権を主張している、本出願の前に出願された特許または発明者証の外国出願を以下に、枠内をマークすることで、示しています。

Prior Foreign Application(s)

外国での元行出版 2000-220404		Japan
(Number) (番号) 2000-220405		(Country) (闰名) Japan
(Number) (寄号) 2002-272830	X	(Country) (国名) Japan

私に、第3.5編米国法典119条 (e) 項に基いて下記の米 国特許出顧規定に記載された権利をここに主要いたします。

(Application No.) (Filing Date) (出類音)

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10/088,790	21 March 2002
(Application No.)	(Filing-Date)
(出版番号)	(田顧日)
PCT/JP01/06319	23 July 2001
(Application No.)	(Filing Date)
(出願眷号)	(出類日)

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I hereby claim foreign priority unider Title 35, United States Code, Section 119 (a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed.

21 July 2000	
(Day/Month/Year Filed)	מ
(出 城 华月日) 21 July 2000	П
(Day/Month/Year Filed)	U
(出颗年月日)	
19 September 2002	\boxtimes
(出版年月日) 21 July 2000 (Day/Month/Year-Filed) (出版年月日)	0

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(Application No.) (Filing Date) (出願哲)

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Pending
(Status: Patented, Pending, Abandoned)
(現況: 特許許可済、保護中、放棄済)
(Status: Patented, Pending, Abandoned)

(現況: 特許許可務、係爲中、放棄済)

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UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page _1_ of _1_

PATENT NO.

7,219,761

APPLICATION NO. :

10/804,836

ISSUE DATE

May 22, 2007

INVENTOR(S)

Toshihiro Fukuda et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On the cover page:

On the cover page, section (30) Foreign Application Priority Data, line 3,

"2000-272830" should be --2002-272830--.



Application No. (if known): 10/804,836

Attorney Docket No.: 10122/005003

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